UNITED STATES DEPARTMENT OF COMMERCE
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SERIAL NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.
[illegible]	[illegible]	PETITO	[illegible]

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EXAMINER	
[illegible]	
ART UNIT	**PAPER NUMBER**
[illegible]	13

DATE MAILED: [illegible]

This is a communication from the examiner in charge of your application.

COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 3/20/86 ☐ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), _____ days from the date of this letter.
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:

1. ☒ Notice of References Cited by Examiner, PTO-892.
2. ☐ Notice re Patent Drawing, PTO-948.
3. ☐ Notice of Art Cited by Applicant, PTO-1449
4. ☐ Notice of informal Patent Application, Form PTO-152
5. ☐ Information on How to Effect Drawing Changes, PTO-1474
6. ☐ _____

Part II SUMMARY OF ACTION

1. ☒ Claims 41 - 88 are pending in the application.
   Of the above, claims 83-85 are withdrawn from consideration.
2. ☐ Claims _____ have been cancelled.
3. ☐ Claims _____ are allowed.
4. ☒ Claims 41 - 82 and 86-88 are rejected.
5. ☐ Claims _____ are objected to.
6. ☐ Claims _____ are subject to restriction or election requirement.
7. ☐ This application has been filed with informal drawings which are acceptable for examination purposes until such time as allowable subject matter is indicated.
8. ☐ Allowable subject matter having been indicated, formal drawings are required in response to this Office action.
9. ☐ The corrected or substitute drawings have been received on _____. These drawings are ☐ acceptable; ☐ not acceptable (see explanation).
10. ☐ The ☐ proposed drawing correction and/or the ☐ proposed additional or substitute sheet(s) of drawings, filed on _____. has (have) been ☐ approved by the examiner. ☐ disapproved by the examiner (see explanation).
11. ☐ The proposed drawing correction, filed _____, has been ☐ approved. ☐ disapproved (see explanation). However, the Patent and Trademark Office no longer makes drawing changes. It is now applicant's responsibility to ensure that the drawings are corrected. Corrections MUST be effected in accordance with the instructions set forth on the attached letter "INFORMATION ON HOW TO EFFECT DRAWING CHANGES", PTO-1474.
12. ☐ Acknowledgment is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. _____; filed on _____.
13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.
14. ☐ Other

Claims 42-52, 54, 56, 58. 60-61. 63-82 and 86-88 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims are again considered to be functional, indefinite and alternative for the reasons stated in the last Office action. The terms "substituted (all occurrences) and "a precursor" are still considered to render the claims indefinite.

Applicant's arguments filed March 20, 1986 have been fully considered but they are not deemed to be persuasive. Applicants are required by the statute to particularlly point out and distinctly claim the invention and the claims in their present form do not meet this requirement.

The following is a quotation of 35 U.S.C. 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title. if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

> Subject matter developed by another person, which qualifies as prior art only under subsection (f) and (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims42-48, 86 and 87 are rejected under 35 U.S.C. 103 as being unpatentable over each of the patents to Szarek et al., Nair et al., the PCT French patent or the Kochetkov et al reference for the reasons of record, paper No. 10.

Again, the applicants arguments have been carefully noted, but are not convincing. Although the references do not show the removal of a substituted alkyl protective group from a saccharide moiety, the removal of other protective groups is shown in the various references. Note the French Patent in particular. It would still appear to be obvious to prepare other di, tri. oligo, etc. saccharides from the prior art processes to any person of ordinary skill in the art having the above references before him in the absence of verified data to the contrary.

Claim 88 is rejected under 35 U.S.C. 103 as being unpatentable over each of the Szarek et al., Nair et al., PCT French Patent and Kochetkov et al references for the reasons stated above in combination with the Towey

et al and Curtin et al references for the reasons stated in the last Office action.

The arguments presented by applicants are not convincing. The same rationale applies for this rejection as stated above.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless-

> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent.
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.
>
> (f) he did not himself invent the subject matter sought to be patented.

Claims 49-82 are rejected under 35 U.S.C. 102 (a) (b), (e) and (f) as anticipated by or, in the alternative, under 35 U.S.C. 103 as obvious over each of the patents to Lormeau et al. '662, '758 and '770. Each of the patents discloses heparin fractions of di, tri and oligosaccharides and further disclose pharmaceutical compositions thereof and their use in a method for treating thrombosis. The instant compounds, compositions and methods are deemed to be anticipated thereby or prima facie obvious therefrom.

Claims 83-85 stand withdrawn from consideration as being directed to a non-elected invention for the reasons stated in Paper No. 10. See 37 CFR 1.142(b) and MPEP 821.03.

Any inquiry concerning this communication should be directed to J. R. Brown at telephone number 703-557-5055.

Johnnie R. Brown
JOHNNIE R. BROWN
PRIMARY EXAMINER
ART UNIT 123

Brown:ebw
6/13/86